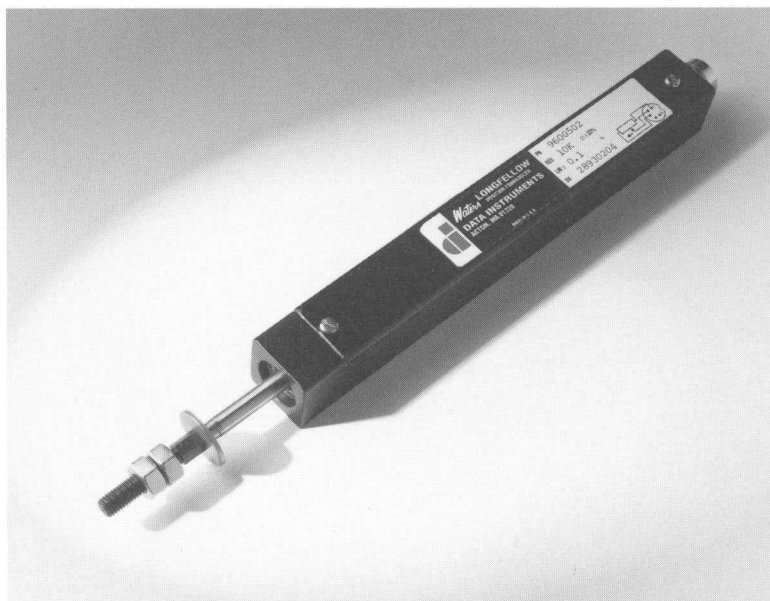


Waters **Short Longfellow®** Linear Position Transducer

The Short Longfellow is frequently used for measuring linear position or displacement up to 6" on a wide variety of manufacturing and process equipment. The mechanical design of the unit's front and rear bearings, anodized extruded aluminum housing, stainless steel shaft and precious metal wipers are suitable for a factory's harsh environment.

Based on the proprietary MystR® conductive plastic film, it provides a high resolution, absolute position measurement without external signal conditioners.



Features

Precious metal wipers

.081" thick housing with 6 mm shaft

Shaft seals

MystR plastic element

Absolute continuous measurement

High performance bearings

High level DC output

Benefits

Insures high performance, low noise

Rugged construction for manufacturing environment

Protects internal components from factory environment

Tested up to 1 billion operations

Accurate position at power up

Long life even with side load conditions

Works with simple controls

Applications

- Injection molding machines
- Printing presses
- Meat packing equipment
- Weather instruments
- Drill presses
- Woodworking machines
- Cranes
- Front-end loaders
- Scales

Technical Specifications

Model	Unit	Short/Longfellow
MECHANICAL		
Total Mechanical Travel	in. (mm)	1.20 (30.5) to 6.15 (156.2)
Starting Force (max.)	lb. (kg)	1.0 (.450)
Total Weight	lb. (kg)	0.26 (.12) to 0.49 (.22)
Backlash	in. (mm)	0.001 (0.025)
Life	operations	1 billion

ELECTRICAL

Theoretical Electrical Travel (in 1" increments)	in. (mm)	1 (25) to 6 (150)
Independent Linearity*	±%	1
Total Resistance	Ω/in. elect. travel	1.5K
Resistance Tolerance	±%	20
Operating Temperature	°C	-65 to +105
Resolution		infinite
Power Rating		0.75 Watt/in. elect. travel
Recommended Wiper Current	μA	<1
Electrical Connection		Binder Series 681 connector or equivalent

OPTIONS**

- Other Electrical Travels
- Independent Linearity to ±.1%*
- Water-Resistant Seal***
- Rod-End Bearings
- Ball Joint Assembly
- Other Resistance Values
- Other Resistance Tolerances

ORDERING INFORMATION

Item numbers are for standard models only.

Model	Item Number
SLF-25	F56101101
SLF-50	F56102101
SLF-75	F56103101
SLF-100	F56104101
SLF-150	F56105101

* 5 to 95% of Theoretical Electrical Travel

** Minimum quantities may be required.

*** 5lb. (2.3 kg) starting force.

NOTE: Do not test using an Ohmmeter on a Rx1 scale or other current devices. Excessive wiper current may cause output errors and will cause damage. Zero side load is recommended to achieve maximum life.

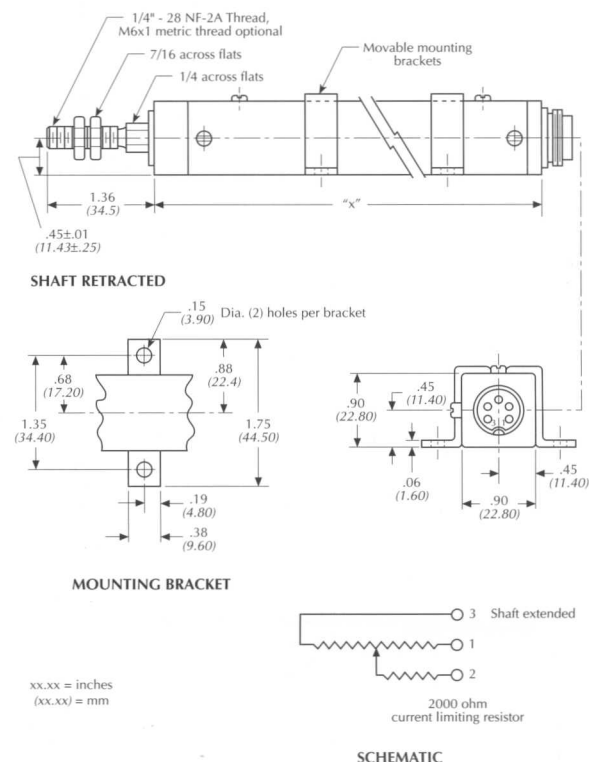
WARRANTY

All Data Instruments products are warranted against defective materials and workmanship for a period of one year from the date of delivery to the original purchaser. Any product that is found within the one year period not to meet these standards will be replaced or repaired at the discretion of Data Instruments. No other warranty is expressed or implied. Data Instruments accepts no responsibility for misuse, misapplication or unauthorized modification of its products. Data Instruments accepts no liability for damages, including, any anticipated or lost profits, incidental damages, consequential damages, costs, time charges or other losses incurred in connection with the purchase, installation, repair or operation of our products, or any part thereof.

Specifications subject to change without notice.

PRINTED IN USA 5K 11/93 UL ITEM #1098800 SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Dimensions



Model	Dim. "x" (nominal)	Total Mechanical Travel	Theoretical Electrical Travel	Resistance
	Inches mm	Inches mm	Inches mm	Ohms
		(min.) (min.)		
SLF-25	4.05 103.0	1.20 30.5	1.00 25.4	1.5K±20%
SLF-50	5.05 128.0	2.20 55.9	2.00 50.8	3.0K±20%
SLF-75	5.95 151.0	3.15 80.0	3.00 76.2	4.5K±20%
SLF-100	6.95 177.0	4.15 105.4	4.00 101.6	6.0K±20%
SLF-150	8.95 227.0	6.15 156.2	6.00 152.4	9.0K±20%

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